

Just the Facts...

Oral Fitness During Deployment Dental Caries

Why is oral fitness important?

Today's Soldiers need to stay physically fit and healthy in order to support their unit's preparations and deploy rapidly to any region of the globe. Combat-ready Soldiers need healthy mouths for:

1. Communication (speaking, smiling, or whistling). The teeth work with the lips and tongue to make the sounds that we use for talking.
2. Energy intake (tasting, chewing, and swallowing). A healthy, high-fiber diet requires chewing. Your body can get more vitamins and nutrients from food after it has been chewed.

Oral diseases interfere with these functions, and can cause severe, life-threatening illness. Every time a Soldier has to be transported out of the area of operations for dental treatment, they expose themselves and their fellow Soldiers to attacks from insurgents. Soldiers who do not take care of their mouths could put their buddies in the line of fire.

There are three major causes of dental casualties during training and deployments:

- Periodontal disease (or gum disease)
- Painful or infected wisdom teeth
- Dental caries (tooth decay)

Most dental emergencies during field training or operations are caused by tooth decay or dental caries.

What causes dental caries?

A sticky coating called plaque grows on your teeth constantly. If you don't clean the plaque off every day, the bacteria (germs) that live in your mouth move into the plaque and multiply.

Every time you eat foods containing simple carbohydrates (sugar and starch), these bacteria use it to produce acids. Within about 3 minutes, the acids start attacking and dissolving the hard surface (enamel) of your teeth.



**Poor oral hygiene and high sugar intake
causes severe decay**



**Drinking soda or sports drinks too often
causes this type of decay**

The more often you eat starchy or sugary snacks, the more acid attacks your teeth. Snacks such as cookies, crackers, candy, or baked goods contain both sugar and starch, and are even more harmful to your teeth. The high-carbohydrate (high starch) content of field rations can cause tooth decay.

Beverages that are sweetened with sugar (sucrose, glucose or fructose) or high-fructose corn syrup, such as sports drink, energy drink, soda, or punch, promote dental caries. Many deployed Soldiers use sugary, high-caffeine drinks throughout the day in order to stay hydrated and alert.

They may also go for weeks without cleaning their mouths. These Soldiers often develop severe dental problems that require numerous visits to the dental clinic for dental reconstruction upon redeployment.

What are the symptoms of Dental Caries?

As with all oral diseases, cavities are like ticking time bombs. You usually cannot tell that you have decay until it causes:

- Temperature sensitivity
- Swelling of the mouth, face or neck
- Trouble pronouncing words
- Difficulty eating
- Inability to sleep
- Excruciating pain



If the dentist tells you that you have a cavity, get it taken care of as soon as possible, before it starts to hurt. If you wait until your tooth hurts, it may be too late to save the tooth. Tooth decay slowly grows down into the tooth until the pulp, or nerve, becomes infected. You may need to have the infected nerve removed (a root canal procedure). If you let the decayed area become too large to fix, you will have to have the tooth pulled. The infection can sometimes spread to other areas of the face or throat, or to your brain, and cause death.

Who gets dental caries?

Anyone can get cavities. Unfortunately, many deployed Soldiers stop cleaning their mouths every day. Many also engage in harmful oral habits, such as tobacco use and excessive consumption of sugary drinks or snacks, to stay alert or deal with the stress of deployment. Soldiers who do not take care of their mouths during deployment develop severe dental problems that require numerous visits to the dental clinic for dental reconstruction upon redeployment.



Untreated dental infection that drained through the face

How can you prevent dental caries?

Avoid becoming a dental casualty by attaining Dental Class 1 (no dental treatment needed) before you deploy. Have a dental exam and a cleaning every year to detect and treat dental caries as soon as possible.

Use Combat Stress Control techniques to deal with the stress of deployment, instead of harmful oral habits. Just like a good motor sergeant uses a PMCS schedule (preventive maintenance, checks and services) to keep his/her vehicles running, you need to PMCS your mouth every day during deployment to stay fit and healthy!

DAILY	
Clean Your Mouth	Watch What You Put In Your Mouth
Brush after meals or before sleeping to remove food debris, plaque buildup and bacteria. Use a toothbrush with a small head that fits around the back teeth and can clean everywhere.	Avoid or cut back on tobacco. Smokeless tobacco wears away your gums and increases your risk of tooth decay and gum disease. It causes white leathery patches that can turn into oral cancer. Smoking can cause gum disease, bone loss, tooth loss, and oral cancer.
<ul style="list-style-type: none"> No toothbrush? <ul style="list-style-type: none"> Swish with water after eating Wipe teeth with a clean cloth 	Eat healthy foods from the 5 major food groups. Your mouth needs nutrients such as vitamins A, C, D, E, B2, Niacin, B6, B12, Folic Acid, and minerals such as Zinc, Iron, and Calcium to repair the lining of your mouth, maintain your gums, and prevent bone loss around your teeth.
Use fluoride toothpaste and a gentle, circular motion for 2 minutes	Limit drinks that are sweetened with decay-causing sugars (fructose, glucose or sucrose and high fructose corn syrup). They include sports drinks, energy drinks, sodas, and punch.
Don't rinse, eat or drink for 30 minutes afterwards to allow the fluoride in the toothpaste to protect your teeth	Limit sugary, sticky, or starchy between-meal snacks
<ul style="list-style-type: none"> No toothpaste? Brush anyway. 	Eat tooth-friendly snack foods that protect or improve your oral health such as: <ul style="list-style-type: none"> Nuts, fruit, raw vegetables, plain yogurt, or cheddar cheese (hardens tooth surface) do not promote decay-causing bacteria Black tea contains fluoride
Floss daily to clean between teeth where a toothbrush can't reach	Use gum or mints that contain xylitol as the first ingredient, for about 5 minutes after eating meals or snacks. Xylitol is a natural sweetener that blocks bacteria from turning starchy/sugary foods into acids that cause dental caries. Xylitol gum can be found in the accessory pack of the MRE.
If you are prone to cavities, your dentist may prescribe fluoride tablets to take with you during deployment. <ul style="list-style-type: none"> Sucking on one tablet once a day will help protect your teeth. 	
Toothbrush, toothpaste, and dental floss are available in the Health and Comfort Pack (HCP), Type I (NSN 8970-01-368-9154)	



Think about it.
How do **you** want to look
when you come home?

